

SCIENTIFIC RHETORIC AND THE GANZFELD DEBATE

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Sociologists of science within the "relativist" program hypothesize that conflicts over theories held by scientific groups harboring radically differing assumptions cannot be immediately resolved empirically (Collins, 1985; Collins & Pinch, 1982). Each group tends to believe that evidence refuting its claims has been derived incompetently.

The inability of Honorton (1985) and Hyman (1985) to resolve their differences supports the relativistic orientation. Their communiqué merely presents guidelines for future experimenters. They do not reach joint conclusions about the meaning of the ganzfeld evidence, and it is unlikely that they will agree regarding future experiments. In a study of paranormal metal-bending research, a realm of inquiry similar to that of the ganzfeld studies, Collins and Pinch (1982) note:

It would seem that evidence is so bound up with the society or social group which gives rise to it that theories held by members of radically different scientific-social groups cannot be adequately tested against each other by experiment. (p. 184)

In his original defense, Honorton (1985), an old hand at arguing with his critics, points out aspects of the problem. For example, no matter how carefully a randomization process is conducted, critics may call for greater exactitude as justification for rejecting the parapsychologist's conclusions. He notes:

It would not be unreasonable for readers to suppose that the disagreement [regarding the ganzfeld data] mainly reflects our respective a priori views. (p. 81)

Hyman and Honorton's (1986) joint communiqué presents a more optimistic view. They predict that:

If a variety of parapsychologists and other investigators continue to obtain significant results under these conditions [ones which the authors

agree to be necessary for valid replication], then the existence of a genuine communications anomaly will have been demonstrated. (p. 354)

Sociologists might ask, "What percentage of established scientists would then accept psi as proved? How will these individuals find out about this hypothetical body of evidence?"

Science can be viewed as a rhetorical process in which speakers attempt to persuade audiences of the authenticity of their conclusions using scientific "situations" (journal articles, scholarly books, presentations, and so on). The process is political in that some groups have greater power in controlling the speakers, arguments, situations, and audiences that constitute the persuasion process. Like all communities, scientists label some of their members as deviant. Such "boundary work" separates science from "nonscience," or "good" science from "border" or "marginal" science (Gieryn, 1983). Powerful groups frequently use the latent ideology that justifies their position to determine which powerless groups are labeled deviant. Sociologists hypothesize that deviance labeling is necessary for the preservation of all groups.

The Hyman-Honorton debate illustrates the dynamics of deviance labeling within science. Hyman's (1985) critique questioned the competence and honesty of various parapsychological researchers. He pointed out alleged procedural flaws, inadequate security, possible sensory leakage (which should have been precluded as a possibility), improper analysis, inadequate randomization, and so forth. The skeptical segment of any audience reading his critique would tend to join Hyman in stigmatizing these researchers as deviant and their conclusions as unjustified.

Honorton's (1985) attitude is typical of that demonstrated by other parapsychologists. Although he deems Hyman's criticisms unjust, he supports future attempts to increase vigilance against "flaws." A latent effect of this behavior is that it supports the positivistic assumptions of science, the notion that the scientific method can resolve such conflicts. Parapsychologists tend to be optimistic that the "scientific process" will vindicate their claims, ignoring the process that labels them as deviant.

Sometimes parapsychologists resort to the rhetorical strategy of calling in outside experts to mediate and resolve technical issues. Burton Camp (O'Neil, 1938), President of the Institute of Mathematical Statistics, supported the validity of J. B. Rhine's statistical analysis. Honorton (1985) uses David Saunders' comments about statistics to attack Hyman's (1985) factor analysis. Rosenthal's com-

ments in this volume of the *JP* fall within this category of rhetoric. Although technical issues can be resolved through the use of outside experts, conflicts on basic conclusions are left open.

The relativistic orientation, coupled with the realization that parapsychology functions as a deviant group within science, allows a degree of predictive ability regarding issues of this type. For example, suppose that proponents supporting Honorton's position generated new data supporting belief in psi that complied with the dictums called for in the Hyman-Honorton communiqué. Would mainstream scientists be converted? Unless the present deviance-labeling system within science changes, we would predict only a slight shift in opinion.

It is doubtful that this hypothetical new information would be published in *Science*, or any other mainstream journal. This would occur as a result of the rhetorical and political nature of science. Elite scientists within the American Association for the Advancement of Science are generally unfamiliar with parapsychological research and more skeptical about claims of the paranormal than are average scientists (McClenon, 1982, 1984). These potential referees would tend to decide that experimenters producing evidence supporting belief in psi had not sufficiently adhered to the Hyman-Honorton dictums. Consequently, this hypothetical body of data would not come to the attention of most scientists and would not affect their opinions.

The hypothetical evidence would be most effective in causing the *parapsychological community* to accept Honorton's "internal attention states" paradigm. This body of scientists can be reached through journals accessible to parapsychologists and could be swayed by Honorton's arguments.

Let us suppose that future ganzfeld proponents were unable to replicate the earlier experiments. It is hypothesized that they would not reject their basic paradigm. After all, Patanjali set down the aphorisms supporting the "internal attention states" orientation in about 2000 B.C. Having demonstrated such longevity, this paradigm would certainly survive a few modern failures to support it. Many parapsychologists believe that researchers during previous eras observed psychokinetic and mediumistic phenomena that are seemingly unattainable during recent times. Future parapsychologists would undoubtedly maintain their belief in psi in the face of their failure to replicate the ganzfeld experiments.

An ironic aspect of the deviance-labeling system is that parapsychologists support many aspects of it. After all, skepticism within

science is not irrational. The scientific community must deal with many far-fetched claims, many of which receive less-than-complete consideration. Parapsychologists' vigilance in searching out possible errors within their own community's research contributes to the perpetuation of this situation. For example, Carl Sargent, who has been associated with many ganzfeld experiments, has been the focus of a degree of controversy and has apparently stopped doing psychical research. Although the most important technical problem that parapsychologists face is the low signal-to-noise ratio within their experiments, the Hyman-Honorton guidelines do not focus on this situation.

My comments are not meant to detract from the value of Honorton's research program, the usefulness of the Hyman-Honorton debate, or the need for further efforts along the lines of their joint communiqué. Such efforts are valuable as part of "doing science." My goal is to point out the degree to which the social interaction surrounding this controversy reinforces the notion that science is relativistic and that parapsychology fulfills the role of a deviant science within the scientific community. Through adhering to the Hyman-Honorton guidelines, parapsychologists can improve the quality of their arguments, even though their political problems remain. Political battles within science are not won by "good" or "careful" experimentation. After the political battles are won, the experiments conducted by the victors are deemed to be good! Parapsychologists are not doomed to failure in this conflict, but their success is as dependent on their political ability as it is on their methodological expertise. The validity of this sociological orientation, like Honorton's internal attention state theory, will be evaluated by future researchers engaging in the rhetorical and political process called science.

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